

# **Logic Model**

# **Partner Inputs**

- K-12 teachers
- · School district administrators

# **Platform Inputs**

- Standards-aligned instructional materials:
- 1) Classroom-ready courses
- Video-based lessons
- Cost-effective hands-on activities
- Student-facing assignable activities
- Recommended extension opportunities

# 2) STEM Learning resources

- Interactive datasets
- Project-based learning
- · Authentic reading material
- Discussion questions and vocabulary

#### 3) Assessments

- Quizzes and quiz games
- Classroom controls and monitoring:
  - Task assignment
  - Graphic organizers and checks for understanding
  - Assignment Builder for custom assignments
  - Create and manage classes; sync with LMS
- Admin Console for District and School leaders
  - Content restriction and promotion
  - Student, Class, and Faculty directories.

Implementation Support & Scaffolding Inputs

Read-aloud options and reading skill quiz

• Leveled texts with comprehension support:

• Lesson guides and classroom strategies for

 Editable Graphic Organizers Text Translator for 40+ languages

• Luna, an Al-powered teaching assistant, includes:

Spanish translations

Writing prompts

scientific investigation

Lesson Planner

Text Leveler

- Usage Report and CSV download of Newsela writing data
- Admin Resource Hub and Newsela Engagement Kits

# **Activities**

# **Partner Activities**

- Teachers implement Newsela STEM teaching and learning materials
- Schools have access to Newsela STEM

# **Platform Activities**

- Teachers are able to select instructional materials which are relevant to their curriculum.
- Teachers are able to efficiently assign classroom tasks, homework assignments, and assessments.
- Teachers are able to monitor student engagement with the learning materials.
- School leaders are able to configure content and review usage.

**Implementation Support Activities** 

• Teachers have access to support tools

Teachers incorporate Newsela STEM

content in their classroom instruction.

lessons and activities.

**Content Activities** 

to implement inclusive, differentiated

# Outcomes: short term (class period)

### **Partner Outcomes**

- Teachers incorporate more and more varied materials into their instruction and teaching practices
- Teachers feel more equipped to make real-world connections and to incorporate interdisciplinary learning in their instruction

# **Platform Outcomes**

- Teachers quickly and confidently incorporate resources, build assessments
- School leaders can see usage of content aligned with curriculum and standards

# Outcomes: intermediate (in-year)

# **Partner Outcomes**

**Platform Outcomes** 

and reporting

- Teachers feel more confident teaching varied STEM content using varied methods and tools
- School scores improve on state STEM assessments

• Teachers experience increased efficiency in

identifying and selecting relevant resources

are struggling and provide support sooner

· School leaders configure content to adapt to

· Teachers deliver curriculum with fidelity

instruction to suit all learners

• Teachers can more easily identify students who

• Teachers have time and resources to differentiate

School leaders take action based on dashboards

Teachers are on pace with curriculum and standards

• Students have improved cross-disciplinary thinking, literacy skills, and flexibility to address complex challenges

# **Platform Outcomes**

• STEM lessons and assignments are varied, differentiated, and incorporate diverse methodologies

Outcomes: long term (+1 year)

state STEM assessments

**Partner Outcomes** 

• Incorporation of STEM activities is wide-spread and effective

• Sustained and lasting year-over-year increase in

students performing at or above grade level on

- · Lessons are engaging, standards-aligned, and address the needs of all learners
- · Curriculum is aligned to specific needs of school

- STEM into lessons, locate additional activities and

# **Implementation Outcomes**

• Teachers quickly and confidently adapt lessons to accommodate the needs of diverse learners

# **Implementation Outcomes**

- Teachers feel supported implementing new teaching strategies
- Teachers can easily meet the diverse needs of their students
- Students have improved comprehension of STEM learning materials
- All learners experience improved performance against state STEM benchmarks

# **Implementation Outcomes**

• All learners performing at or above grade level on state STEM assessments

# **Content Inputs**

• Real-world scenarios and problems:

Guided Highlighting Tier III Vocabulary definitions

- Exploration of science phenomena in everyday life
- Virtual science field trips
- Exposure to STEM careers
- Engagement with region-specific data
- Activities connected to current events, holidays, and the news
- Issues-based learning and problem-solving
- Cross-disciplinary STEM content:
  - Reading texts in science, technology, engineering, and math
  - Analyzing data and applying scientific explanations
  - Math videos to support science investigations
  - Engaging with societal issues with interdisciplinary dimensions
- Scientific communication:
  - Embedded reading activities and writing prompts
  - Obtaining, evaluating, and communicating information activities
- Science and engineering practices:
  - Data investigation and analysis
  - Claim, evidence, reasoning (CER) to promote scientific argumentation

# **Content Outcomes**

- Lessons feature explicit opportunities for students to make meaningful science connections beyond the classroom
- Lessons feature explicit opportunities for students to experience integrated STEM learning
- Lessons encourage students to develop science and engineering practices
- Students engage with more and more varied readings which contextualize STEM topics
- Students have opportunities to practice scientific communication

# **Content Outcomes**

- Students have positive attitudes towards STEM learning and perception of STEM content as personally relevant
- Students disciplinary content knowledge (science, ELA, math)
- Students Improve in disciplinary language in STEM and comprehension of STEM texts
- Students demonstrate higher-quality scientific argumentation
- Students improve understanding of data representations and analysis

# **Content Outcomes**

- Students are motivated to pursue STEM in career and lifelong learning
- Students apply problem-solving and critical thinking skills in their everyday lives • Students develop deeper conceptual
- understanding across disciplines which fosters holistic reasoning
- Students are confident in their ability to succeed in science and to communicate as scientists.
- Students understand how to evaluate information they encounter outside of the classroom, and communicate science ideas to others